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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,013	07/31/2003	Hugh E. McLoone	003797.00541	9522

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BANNER & WITCOFF LTD.,
ATTORNEYS FOR MICROSOFT
1001 G STREET , N.W.
ELEVENTH STREET
WASHINGTON, DC 20001-4597

EXAMINER	
CULLER, JILL E	
ART UNIT	**PAPER NUMBER**
2854	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/631,013	MCLOONE, HUGH E.	
	Examiner	Art Unit	
	Jill E. Culler	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20,23 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20,23 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 September 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 6-10, 13 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,288, 706 to Leman in view of U.S. Patent No. 6,204,837 to Smith.

With respect to claim 1, Leman teaches a computer keyboard, 20, configured for navigation of a graphical user interface of a host computer, comprising: a first navigation section, 40, including a first input device, 80, see column 3, lines 26-29, configured to receive manual movement and responsive thereto configured for moving an image relative to an image display screen along perpendicular axes; see column 4, lines 56-59, a second navigation section, 40, including a second input device, 80, configured to receive manual movement and responsive thereto, see column 3, lines 26-29, and an alphanumeric section laterally disposed between the first navigation section and the second navigation section. See Figure 1 in particular.

Leman does not explicitly teach that the first input device is configured to receive manual movement according to a first user-selectable mode and responsive thereto configured for scrolling content items of a display screen

relative to the display screen along perpendicular axes so as to change movement of said content items along one of the perpendicular axes based on a predetermined elapsed time and a second user-selectable mode for freeform moving a graphical pointer relative to the perpendicular axes, or that the second input device is configured for moving a graphical pointer relative to the perpendicular axes.

Smith teaches a computer, 10, having multiple input devices, 24, 25, 35, 37, configured for receiving manual movement, see column 2, lines 48-57, wherein each device has a first user-selectable mode configured for scrolling content items of a display screen relative to the display screen along perpendicular axes so as to change movement of said content items along one of the perpendicular axes based on a predetermined elapsed time and a second user-selectable mode for freeform moving a graphical pointer relative to the perpendicular axes. See column 3, lines 18-54.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the user-selectable input device configuration of Smith with the input devices of Leman in order to be able to scroll the image and move the graphical pointer at the same time.

With respect to claim 6, Leman teaches the first input device and the second input device each comprises a trackball device. See column 3, lines 31-34 and Figure 1 in particular.

With respect to claim 7, Leman teaches the first input device comprises a scroll wheel assembly, 583. See column 6, lines 65-67 and Figure 6B.

With respect to claims 8-10, Leman teaches an input device comprising a touchpad, 784, see column 7, lines 4-9 and Figure 6D, and teaches this device comprises either the first input device or the second input device, while the other input device comprises a trackball device. See column 6, lines 60-65.

With respect to claim 13, Leman teaches a computer keyboard, 20, configured for navigation of a graphical user interface of a host computer, comprising: a keyboard housing, 21; a trackball device, 80, disposed with the keyboard housing having an opening, said trackball device having a movable ball, 81, within said opening and said movable ball being configured to receive manual movement and responsive thereto, see column 3, lines 26-33, a second input device configured to receive manual movement and responsive thereto, column 3, lines 26-29; and an alphanumeric section disposed between the trackball device and the second input device. See Figure 1 in particular.

Leman does not explicitly teach that the trackball device is configured to receive manual movement according to a first user-selectable mode and responsive thereto configured for scrolling content items of a display screen relative to the display screen in a vertical direction and a horizontal direction so as to change movement of said content items along one of the vertical and horizontal direction based on a predetermined elapsed time and a second user-selectable mode for freeform moving a graphical pointer relative to the perpendicular axes, or that the second input device is configured for moving a graphical pointer relative to two dimensions of the display screen.

Smith teaches a computer, 10, having multiple input devices, 24, 25, 35, 37, configured for receiving manual movement, see column 2, lines 48-57, wherein each device has a first user-selectable mode configured for scrolling content items of a display screen relative to the display screen in a vertical direction and a horizontal direction so as to change movement of said content items along one of the vertical and horizontal direction based on a predetermined elapsed time and a second user-selectable mode for freeform moving a graphical pointer relative to two dimensions of the image display screen. See column 3, lines 18-54.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the user-selectable input device configuration of Smith with the input devices of Leman in order to be able to scroll the image and move the graphical pointer at the same time.

With respect to claim 19, Leman teaches an input device comprising a touchpad, 784, see column 7, lines 4-9 and Figure 6D, and teaches this device comprises either the first input device or the second input device, while the other input device comprises a trackball device. See column 6, lines 60-65.

With respect to claim 20, Leman teaches all that is claimed, as in the above rejection of claim 13, and that the keyboard is wireless. See column 4, lines 19-22 and Figure 2 in particular.

3. Claims 2-5 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leman in view of Smith as applied to claims 1, 6-10, 13 and 19-20 above, and further in view of U.S. Patent No. 4,720,703 to Schnarel Jr. et al.

With respect to claims 2-5, Leman and Smith teach all that is claimed, as in the above rejection of claims 1, 6-10, 13 and 19-20. Also, Leman teaches the first input device, 40, includes a trackball assembly, 80, including a spherical member being rotatably configured to receive the manual movement.

Leman and Smith do not explicitly teach a scrolling sensing system that determines when said spherical member is rotated for scrolling along one of the perpendicular axes, or configured to sense a transition state of the spherical member when the member is rotated for a first directional scrolling along one of the perpendicular axes and responsive to the transition state change to a second directional scrolling along the other of the perpendicular axes, or that determines when the spherical member is rotated along a perpendicular axis to a threshold level after a transition state of the directional scrolling so as to maintain said scrolling.

Schnarel, Jr. et al. teaches a scrolling sensing system for an input device, 40, that determines when the input device is manipulated for scrolling along a perpendicular axis and is configured to sense a transition state when the input device is manipulated for a first directional scrolling along one of the axes and responsive to the transition state change to a second directional scrolling along the other of the perpendicular axes and determines when the device is

manipulated to a threshold level after a transition state of the directional scrolling so as to maintain said scrolling. See column 4, lines 19-28.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Leman and Smith to have the additional scrolling sensing configuration of Schnarel Jr. et al., to be able to explore areas on the screen outside the original image area.

With respect to claims 14-18, Leman and Smith teach all that is claimed, as in the above rejection of claims 1, 6-10, 13 and 19-20 except a scrolling sensing system that determines when said movable ball is rotated for vertical scrolling or horizontal scrolling, or configured to sense a transition state of the movable ball when the member is rotated for vertical scrolling and responsive to the transition state change to horizontal scrolling, or for horizontal scrolling and responsive to the change to vertical scrolling or that determines when the spherical member is rotated for directional scrolling along one of the perpendicular axes to a threshold level after a transition state of the directional scrolling so as to maintain said scrolling.

Schnarel, Jr. teaches a scrolling sensing system for an input device, 40, that determines when the input device is manipulated for vertical scrolling or horizontal scrolling, and is configured to sense a transition state of the movable ball when the member is rotated for vertical scrolling and responsive to the transition state change to horizontal scrolling, or for horizontal scrolling and responsive to the change to vertical scrolling and determines when the spherical member is rotated for directional scrolling along one of the perpendicular axes to

a threshold level after a transition state of the directional scrolling so as to maintain said scrolling. See column 4, lines 19-28.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Leman and Smith to have the additional scrolling sensing configuration of Schnarel Jr. et al., to be able to explore areas on the screen outside the original image area.

4. Claims 11, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leman in view of Smith as applied to claims 1, 6-10, 13 and 19-20 above, and further in view of U.S. Patent No. 5,874,939 to Galvin.

Leman and Smith teach all that is claimed, as in the above rejection of claims 1, 6-10, 13 and 19-20, except that the user-selectable mode is responsive to voice input.

Galvin teaches a keyboard input device which is responsive to voice input. See column 3, lines 55-62.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Leman to use the voice input capabilities of Galvin in order to give the user more flexible control over the input devices.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leman in view of Smith as applied to claims 1, 6-10, 13 and 19-20 above, and further in view of U.S. Patent No. 5,473,344 to Bacon et al.

Leman and Smith teach all that is claimed, as in the above rejection of claims 1, 6-10, 13 and 19-20, except that the first input device is configured to adjust a size scale of a content item of a display screen.

Bacon et al. teaches an input device, 100, configured to adjust a size scale of a content item of a display screen. See column 2, lines 36-42.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Leman to have the size scale adjustment capability of Bacon et al. in order to broaden the functionality of the input device and be able to readily change the size scale of content items on the screen without use of additional devices or commands.

Response to Arguments

6. Applicant's arguments with respect to claims 1-20 and 23-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 6,323,844 to Yeh et al. and U.S. PGPUB 2002/0140668 to Crawford each teach an input device having obvious similarities to the claimed subject matter.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-Th 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jec

Daniel J. Colilla
Primary Examiner
Art Unit 2854